

Tides EDGENUITY Quiz

Select from these words for the definitions below from questions 1 - 7:

- a. Low tide
- b. High tide
- c. Gravity
- d. Moon
- e. Neap tide
- f. Spring tide
- g. Sun
- h. Tidal bore
- i. Tidal range
- j. Tides

1. ____ forms when water is drawn away from the area between high tides
2. ____ the force that pulls the tides
3. ____ the difference between water levels at low and high tide
4. ____ tides that occur during the new and full moons
5. ____ bulge that takes place on parts of Earth facing or opposite the moon
6. ____ the periodic daily rise and fall of ocean water
7. ____ tides that occur during the first and third quarters of the moon

8. An unusually high tide is called a ____ tide.
 - a. Major
 - b. Tall
 - c. neap
 - d. spring

9. How often do tides rise and fall?
 - a. Once a day
 - b. Twice a day
 - c. every 14 days
 - d. every 24 h, 50 m

10. Which of these takes exactly 24 h?
 - a. One rotation of the Earth
 - b. One revolution of the moon around the Earth
 - c. One period between two high tides
 - d. One period between two full moons

11. What kind of instruments do students use as part of the HIGH TIDE to study tidewater?
 - a. A NOAA
 - b. A CTD instrument
 - c. a gyroscope
 - d. a satellite

12. When do the greatest tidal ranges occur?
 - a. Spring tides
 - b. Neap tides
 - c. high tides
 - d. low tides

13. The Bay of Fundy has the greatest tidal ranges on Earth. What can you infer about the Bay of Fundy?
- It faces the moon more often than other places on Earth.
 - It has many rocky beaches.
 - It is a long, narrow inlet.
 - Its tides cannot be predicted accurately.
14. From what is known about spring tides and neap tides, you can conclude that
- The sun's gravity exerts the most power when the moon is on the opposite side of the Earth from the sun.
 - The height of high tides varies with the phases of the moon.
 - Spring tides and neap tides affect the phases of the moon.
 - The moon revolves around the Earth every 14 days.
15. Which statement explains why the moon's gravity is able to create high and low tides?
- The moon is revolving more quickly than the Earth is rotating.
 - The moon is revolving more slowly than the Earth is rotating.
 - Some parts of the Earth never face directly on the sun and moon.
 - The moon is revolving at the same speed that the Earth is rotating.
16. Tides affect the levels of _____ in tidal waters.
- Temperature
 - Salinity
 - nutrients
 - all of the above
17. Which statement describes what is happening at high tide?
- The moon is revolving more quickly than the Earth is rotating.
 - The moon's gravity is dragging water away from the Equator.
 - The moon's gravity is pulling ocean water into a bulge.
 - The sun's gravity pulls with more force than the moon's gravity.
18. Some organisms will base what schedules on tidal movements?
- Reproduction and feeding
 - Feeding and sleeping
 - sleeping and reproduction
 - recreation and predation